

REMARKS

The Applicants are pleased to note the Examiner has indicated Claims 27 and 28 are allowed over the art of record. The Applicants wishes to thank the Examiner for this indication of allowability.

The following Amendment cancels Claims 1, 7, and 29 without prejudice to allow Claims 2-6 and 8-28 to pass to issuance. Applicant reserves the right to pursue canceled Claims 1, 7, and 29 in a continuation application. Claims 2, 3, and 5 have been amended to depend, either directly or indirectly upon allowed Claim 27. Likewise, Claims 8, 9 and 11 have been amended to depend either directly or indirectly, upon allowed Claim 28. Claims 13, 20, and 22 are amended to include certain features recited in allowed Claims 27 and 28.

No new matter is added and no new issues are raised by this amendment. Hence, consideration of the proposed amendments requires no further search. Now in the application are Claims 2-6 and 8-28, of which Claims 13, 20, 22, 27, and 28 are independent. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

Claim Rejections under 35 U.S.C. §103

The Office Action rejects Claims 1-26 as being unpatentable over U.S. Patent No. 6,341,239 of Hyashi, et al. (hereinafter “Hyashi”) in view of U.S. Patent No. 5,862,326 of Bapat (hereinafter “Bapat”) and U.S. Patent No. 6,609,165 of Frazier (hereinafter “Frazier”). Applicants respectfully traverse each of these rejections on the basis of the above amendments and the following arguments that Hyashi in view of Bapat and Frazier fails to teach or suggest all elements of the now pending claims, as described below, and hence does not obviate the claimed invention.

For purposes of clarity in the discussion below, the respective related claim sets will be discussed separately.

A. Rejection of Claims 1-6 and 24 under 35 U.S.C. §103:

The Office Action rejects Claims 1-6 and 24 as being unpatentable over Hyashi in view of Bapat and Frazier. Applicants respectfully traverse this rejection on the basis of the above amendments and the following arguments that Hyashi in view of Bapat and Frazier fails to teach or suggest all elements of the now pending claims, as described below, and hence does not obviate the claimed invention.

Claim 1 has been canceled and therefore Applicants' consider the rejection of Claim 1 moot.

Claims 2-5 and 24 as amended, depend directly or indirectly from independent Claim 27. Claim 27 recites allowable subject matter as identified by the Examiner. As such, neither Hyashi, nor Bapat, nor Frazier alone or in any combination render Claim 27 unpatentable. Accordingly, Claims 2-5 and 24, as amended depend either directly or indirectly from Claim 27 and thus incorporate the allowable subject matter of Claim 27.

Hence, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of Claims 1-6 and 24 under 35 U.S.C. §103.

B. Rejection of Claims 7-12 and 25 under 35 U.S.C. §103:

The Office Action rejects Claims 7-12 and 25 as being unpatentable over Hyashi in view of Bapat and Frazier. Applicants respectfully traverse this rejection on the basis of the above amendments and the following arguments that Hyashi in view of Bapat and Frazier fails to teach or suggest all elements of the now pending claims, as described below, and hence does not obviate the claimed invention.

Claim 7 has been canceled and therefore Applicants' consider the rejection of Claim 7 moot.

Claims 8-12 and 25 as amended, depend directly or indirectly from independent Claim 28. Claim 28 recites allowable subject matter as identified by the Examiner. As

such, neither Hyashi, nor Bapat, nor Frazier alone or in any combination render Claim 28 unpatentable. Accordingly, Claims 8-12 and 25 as amended, depend either directly or indirectly from Claim 28 and thus incorporate the allowable subject matter of Claim 28.

Hence, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of Claims 7-12 and 25 under 35 U.S.C. §103.

C. Rejection of Claims 13-19 and 26 under 35 U.S.C. §103:

The Office Action rejects Claims 13-19 and 26 as being unpatentable over Hyashi in view of Bapat and Frazier. Applicants respectfully traverse this rejection on the basis of the above amendments and the following arguments that Hyashi in view of Bapat and Frazier fails to teach or suggest all elements of the now pending claims, as described below, and hence does not obviate the claimed invention.

The inventions recited in Claims 13-19 and 26 as amended, distinguish patentability over the Hyashi patent in view of the Bapat patent and the Frazier patent. Claim 13 is amended to further define a first determination time and a second determination time. More specifically, Claim 13 is amended to define the first determination time as the time at which the rewriting device transmits to the vehicle controller a request for a deleting or writing operation of the data. In similar fashion, Claim 13 is amended to define the second determination time as from the time at which the rewriting device transmits to the vehicle controller a request for a result of the deleting or writing operation. Neither the Hyashi patent, nor the Bapat patent, nor the Frazier patent alone or in any combination teach or suggest such a first determination time or a second determination time as recited in amended Claim 13. Claims 14-19 and 26 depend directly or indirectly from amended Claim 13 and therefore incorporate the patentable features of amended Claim 13.

Amended Claim 13 recites a rewriting system for rewriting data stored in a memory of a vehicle controller with new data. The rewriting device is capable of communicating with the vehicle controller. Further, the rewriting device configured to

determine that communication between the rewriting device and the vehicle controller is offline when no response is received from the vehicle controller within a first determination time “from the time at which the rewriting device transmits to the vehicle controller a request for a deleting or writing operation of the data.” When the deleting or writing operation of the data is being performed, the determination of offline is prohibited until a second determination time elapses “from the time at which the rewriting device transmits to the vehicle controller a request for a result of the deleting or writing operation,” the second determination time being greater than the first determination time.

According to Bapat’s patent, TIMEOUTrequest, which is determined by the examiner to correspond to the first determination time of the invention, is measured from a request from the client. TIMEOUTreply, which is determined by the examiner to correspond to the second determination time of the invention, is measured from a receipt of Acknowledge from the server. Switching between TIMEOUTrequest and TIMEOUTreply is made in accordance with whether the client receives Acknowledge from the server. Bapat’s patent fails to disclose a scheme of switching between the first and second determination times in accordance with whether a request for a deleting operation or a request for a result of the deleting operation is transmitted.

According to Frazier’s patent, RA_TOV is measured from a TIN request. After multiple retries of the TIN function, LP_TOV is measured. Switching between RA_TOV and LP_TOV is made in accordance with the number of retries of the TIN function. Frazier’s patent fails to disclose a scheme of switching between the first and second determination times in accordance with whether a request for a deleting or writing operation or a request for a result of the deleting or writing operation is transmitted.

The Hyashi patent fails to teach or suggest a rewriting system is configured to determine communication between the rewriting unit and the vehicle controller is off-line when no response is received from the vehicle controller within a first determination time. Furthermore, the Hyashi patent fails to teach or suggest that the rewriting device of the present invention is configured to prohibit the determination of offline until a second

determination time elapses. The second determination time being greater than the first determination time. Moreover, the Bapat patent fails to cure the factual deficiency of Hyashi for Bapat fails to teach or suggest that the second elapsed time period is *greater* than the first elapsed time period. Likewise, Frazier fails to bridge the factual deficiency of Bapat and Hyashi because Bapat teaches away from the teachings of Frazier. Bapat identifies the response/reply protocol taught by Frazier as problematic and teaches away from the use of the response/reply protocol taught by Frazier. Moreover, the proposed modification of the Bapat with the Frazier changes the principle operation of the Bapat response/reply protocol. Hence, the teachings of the references are not sufficient to render the pending claims *prima facie* obvious.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of Claims 13-19 and 26 as amended, under 35 U.S.C. §103(a).

D. Rejection of Claims 20 and 21 under 35 U.S.C. §103:

The Office Action rejects Claims 20 and 21 as being unpatentable over Hyashi in view of Bapat and Frazier. Applicants respectfully traverse this rejection on the basis of the above amendments and the following arguments that Hyashi in view of Bapat and Frazier fails to teach or suggest all elements of the now pending claims, as described below, and hence does not obviate the claimed invention.

The inventions recited in Claims 20 and 21 as amended, distinguish patentability over the Hyashi patent in view of the Bapat patent and the Frazier patent. Claim 20 is amended to include the steps of determining that communication with the vehicle controller is offline if there is no response from the vehicle controller within a reference time from the time at which the request asking the vehicle controller to delete the data is sent and sending to the vehicle controller a request for a result of the operation for deleting. Claim 20 is amended to further define a determination time as “the time at which the request for the result of the operation for deleting is sent.” Neither the Hyashi patent, nor the Bapat patent, nor the Frazier patent alone or in any combination teach or suggest such a determination time as recited in amended Claim 20. Claim 21 depends

directly or indirectly from amended Claim 20 and therefore incorporate the patentable features of amended Claim 20.

Amended Claim 20 recites a method for rewriting data stored in a memory of a vehicle controller. The method includes a step of determining that communication with the vehicle controller is offline if there is no response from the vehicle controller within a reference time from the time at which the request asking the vehicle controller to delete the data is sent. The method further includes a step of determining that communication with the vehicle controller is offline if there is no response from the vehicle controller within a determination time from the time at which the request for the result of the operation for deleting is sent. The determination time is greater than the reference time.

According to Bapat's patent, TIMEOUTrequest, which as determined by the examiner to correspond to the reference time of the invention, is measured from a request from the client. TIMEOUTreply, which as determined by the examiner to correspond to the determination time of the invention, is measured from a receipt of Acknowledge from the server. Switching between TIMEOUTrequest and TIMEOUTreply is made in accordance with whether the client receives Acknowledge from the server. Bapat's patent fails to disclose a scheme of switching between the reference and determination times in accordance with whether a request for a deleting operation is transmitted and if the request for the result of the operation for deleting is sent.

According to Frazier's patent, RA_TOV is measured from a TIN request. After multiple retries of the TIN function, LP_TOV is measured. Switching between RA_TOV and LP_TOV is made in accordance with the number of retries of the TIN function. Frazier's patent fails to disclose a scheme of switching between the reference and determination times in accordance with whether a request for a deleting operation or a request for a result of the deleting operation is transmitted.

The Hyashi patent fails to teach or suggest a method for rewriting data stored in a memory of a vehicle controller capable of determining if communication between the

rewriting unit and the vehicle controller is off-line when no response is received from the vehicle controller within a reference time from the time at which the request asking the vehicle controller to delete data is sent. Furthermore, the Hyashi patent fails to teach or suggest that the method of Claim 20 prohibits the determination of offline until a determination time elapses as measured from the time at which the request for the result of the operation of the operation for deleting is sent. The determination time being greater than the reference time. Moreover, the Bapat patent fails to cure the factual deficiency of Hyashi for Bapat fails to teach or suggest that the second elapsed time period is *greater* than the first elapsed time period. Likewise, Frazier fails to bridge the factual deficiency of Bapat and Hyashi because Bapat teaches away from the teachings of Frazier. Bapat identifies the response/reply protocol taught by Frazier as problematic and teaches away from the use of the response/reply protocol taught by Frazier. Moreover, the proposed modification of the Bapat with the Frazier changes the principle operation of the Bapat response/reply protocol. Hence, the teachings of the references are not sufficient to render the pending claims *prima facie* obvious.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of Claims 20 and 21 as amended, under 35 U.S.C. §103(a).

E. Rejection of Claims 22 and 23 under 35 U.S.C. §103:

The Office Action rejects Claims 22 and 23 as being unpatentable over Hyashi in view of Bapat and Frazier. Applicants respectfully traverse this rejection on the basis of the above amendments and the following arguments that Hyashi in view of Bapat and Frazier fails to teach or suggest all elements of the now pending claims, as described below, and hence does not obviate the claimed invention.

The inventions recited in Claims 22 and 23 as amended, distinguish patentability over the Hyashi patent in view of the Bapat patent and the Frazier patent. Claim 22 is amended to include the steps of determining that communication with the vehicle controller is offline if there is no response from the vehicle controller within a reference time from the time at which the request asking the vehicle controller to write the new data

is sent and sending to the vehicle controller a request for a result of the operation for writing. Claim 22 is amended to further define a determination time as “the time at which the request for the result of the operation for writing is sent.” Neither the Hyashi patent, nor the Bapat patent, nor the Frazier patent alone or in any combination teach or suggest such a reference time and such a determination time as recited in amended Claim 22. Claim 23 depends directly or indirectly from amended Claim 22 and therefore incorporate the patentable features of amended Claim 22.

Amended Claim 22 recites a method for rewriting data stored in a memory of a vehicle controller. The method includes a step of determining that communication with the vehicle controller is offline if there is no response from the vehicle controller within a reference time from the time at which the request asking the vehicle controller to write new data is sent. The method further includes a step of determining that communication with the vehicle controller is offline if there is no response from the vehicle controller within a determination time from the time at which the request for the result of the operation for writing is sent. The determination time is greater than the reference time.

According to Bapat’s patent, TIMEOUTRequest, which as determined by the examiner to correspond to the reference time of the invention, is measured from a request from the client. TIMEOUTReply, which as determined by the examiner to correspond to the determination time of the invention, is measured from a receipt of Acknowledge from the server. Switching between TIMEOUTRequest and TIMEOUTReply is made in accordance with whether the client receives Acknowledge from the server. Bapat’s patent fails to disclose a scheme of switching between the reference and determination times in accordance with whether a request for a writing operation is transmitted and if the request for the result of the operation for writing is sent.

According to Frazier’s patent, RA_TOV is measured from a TIN request. After multiple retries of the TIN function, LP_TOV is measured. Switching between RA_TOV and LP_TOV is made in accordance with the number of retries of the TIN function. Frazier’s patent fails to disclose a scheme of switching between the reference and

determination times in accordance with whether a request for a writing operation or a request for a result of the writing operation is transmitted.

The Hyashi patent fails to teach or suggest a method for rewriting data stored in a memory of a vehicle controller capable of determining if communication between the rewriting unit and the vehicle controller is off-line when no response is received from the vehicle controller within a reference time from the time at which the request asking the vehicle controller to writing new data is sent. Furthermore, the Hyashi patent fails to teach or suggest that the method of Claim 22 prohibits the determination of offline until a determination time elapses as measured from the time at which the request for the result of the operation of the operation for writing is sent. The determination time being greater than the reference time. Moreover, the Bapat patent fails to cure the factual deficiency of Hyashi for Bapat fails to teach or suggest that the second elapsed time period is *greater* than the first elapsed time period. Likewise, Frazier fails to bridge the factual deficiency of Bapat and Hyashi because Bapat teaches away from the teachings of Frazier. Bapat identifies the response/reply protocol taught by Frazier as problematic and teaches away from the use of the response/reply protocol taught by Frazier. Moreover, the proposed modification of the Bapat with the Frazier changes the principle operation of the Bapat response/reply protocol. Hence, the teachings of the references are not sufficient to render the pending claims *prima facie* obvious.

Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of Claims 22 and 23 as amended, under 35 U.S.C. §103(a).

F. Rejection of Claim 29:

The Office Action rejects Claim 29 as being unpatentable over Hyashi in view of Bapat and Frazier. Nevertheless, Applicants respectfully submit the rejection is moot for Claim 29 is cancelled by this amendment. Accordingly, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of Claim 29 under 35 U.S.C. §103.

CONCLUSION

For the foregoing reasons, Applicants contend that Claims 2-6, 8-28 define over the cited art. If there are any remaining issues, an opportunity for an interview is requested prior to the issuance of another Office Action.

Respectfully submitted,

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